IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application		PATENT APPLICATION	
Inventor:	Richard M. Mathis	Art Unit:	3714
Appl. No.:	10/631,108		
Confirm No.:	7759	Examiner:	Ronald Laneau
Filed:	July 31, 2003		
Title:	PROGRESSIVE METER SYSTEM ARCHITECTURE AND METHOD	Customer No. 23910	

DECLARATION OF CARMEN DIMICHELE UNDER RULE 132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Carmen DiMichele, regarding the above identified patent application, declare as follows:

A. Related Experience

1. My experience related to the subject matter of the above-identified application began in 1996 when I worked as a network consultant for Datanamics, Inc., a company in the Manhattan borough of New York, supplying database systems, software, and networking design, equipment, and installation to local companies. This experience continued to 1990 where I started work for SynchroVoice, Inc., of Harrison, New Jersey as an Electrical Engineer working in electronics, including embedded systems programming of local component communication and protocol design.

2. In 1991 I started work in the casino gaming industry with Bally Systems, Inc. as an Electrical Engineer in Bally's casino systems division working primarily on their SDS product line. This product was, and probably still is, the industry's premier class III gaming accounting and player tracking system. My initial task in 1991 was the research and development of data collection network protocols, communications, and devices. I had worked with Bally continuously and was eventually promoted to Senior Electrical Engineer then to the Director of Embedded Systems Development in 1997. With the start of my Directorship came my immersion into the creation and maintenance of the company's intellectual property (IP) and patents regarding its networking products.

3. While still working for Bally, in 1998 I co-founded and became a Managing Director of Weaver, Fuller, and Dyer, LLC., (WF&D) a partnership supplying electrical

and software design and consulting services for several technology companies, including gaming companies. My work with WF&D extended my experience into the technical aspects of product offerings other than Bally's within the same market place. My involvement with WF&D continued until 2001.

4. By 1999 I was promoted within Bally to its Director of Advanced Products. Here, my department became very firmly seated in the monitoring, creation, and maintenance of Bally's IP, patents, and filings regarding their systems products. Under my direction, this department created more than 10 patents per month regarding casino networks and related equipment. The department also filed several patents related to gaming devices. One of the most prominent groups of IP this department was responsible for was Bally's group of iVIEW™ related patents and other filings. This group of technologies was some of the first in the industry to deeply explore Internet Protocol usage in the casino gaming network and set the stage for much more work in this area from Bally and other companies.

5. I was then promoted in 2005 to Bally's Senior Director of Systems Development where my focus included central server architecture and software, as well as, communications and devices as previously. Here, my experience in casino gaming related IP was deeply extended into the central server and wide-area sides of the business.

6. I finally ended my employment with Bally in August of 2007 when I favorably resigned to help form PROEng, LLC where I currently hold the title of Owner and Managing Director. PROEng develops embedded systems for the transport trucking and casino gaming industries, as well as providing product development and planning and IP consultation to these industries.

B. Information Concerning Patent Application Serial No. 10/631,108 (the above-identified application, hereinafter "Mathis")

7. Regarding the comparison of the three patents, Mathis, Wells (US 2002/0114487 A1), and Lockton (US 5,083,400), fundamentally I consider Lockton to be very different such that it appears inappropriate to compare with Mathis from a networking point of view. The context for Lockton is personal PCs interconnected by a large network scheme "mass communications channel" as necessitated by the context. In light of the context of Wells and Mathis which is local networking within a casino, the problem and solution set facing Lockton is entirely different and does not apply to the problem and solution set in the Wells/Mathis context. This is due to the design and construction of these networking methods being greatly different; local, short-range, protocols such as those sited in Wells and Mathis (primarily IEEE-1394, RS232, and CAN) operate on greatly different schemes than those of Lockton's context (FM SCA, Teletex HDTV channel, and POTS as sited). My point being a solution presented in Lockton's context does not equate to a solution in the Wells/Mathis context nor does one make the other obvious.

8. Further, Mathis gives us another solution element over Wells; decentralization. This is vital to the level of progressive and bonus feature peer interaction presented in

Mathis. With this interaction, those features are well advanced by allowing the better resolution regarding simultaneous events, inherent features removing central server security breach methods and reducing security breach points, and a more robust networking method regarding network segment breakage; a link breaking in the decentralized model allows for sub-groups of devices maintaining full functionality. This also creates a system with no single point of failure unlike Wells' "host" or "gaming gateway." Decentralization is not possible in Wells' solution. Mathis' method also applies a distributed database which has great reliability improvements over a centralized database model, such as described in Wells, by maintaining multiple copies of data sets across multiple devices.

9. Trying to make a centralized networking model like Wells facilitate peer-to-peer communications can only be an improvisation. A centralized network cannot be made to exhibit true peer-to-peer communication due to the nature of its structure. Therefore the Wells solution as presented does not show how to conform to a decentralized model properly. This is why Wells sites the requirement of a "host device" or "gaming gateway" in his independent claims. The extension from a classic centralized networking model to a decentralized implementation is not obvious from Wells. I have personally not previously seen consideration of using a true peer-to-peer networking scheme in the casino context due to a solution not being obvious. Moreover what exist here are ad-hoc methods designed to emulate peer-to-peer functionality. These methods do not give the same level of functionality as a true method could.

10. The method of calculating key system variables, such as jackpot amount, within each device as pointed out by Mathis is novel in the casino context relative to Wells. This method is more than a reasonable extension considering a decentralized network capitalizing true peer-to-peer communications. This method is not apparent in a centralized system due to central calculation of system variables being one of the purposes of including a host machine. Device-level calculation gains sub-group abilities beyond a central calculation method as shown in Mathis. Given the addition of event processing between devices improves handing of such real-time data by creating a more efficient communication scheme.

11. Mathis' treatment of progressive and bonusing feature operation demonstrates the advanced capabilities of a decentralized network. It is apparent from Wells' thin treatment of the subject that the solution considers no advancement of the function and only facilitates basic functionality here. Similar treatments are given to network time synchronization in both cases. It appears that Wells is uninterested in the subject and makes no advancement to the function by his solution. Mathis points out this advancement clearly.

12. Regarding the grounds of rejection with respect to claims 14-26 of Mathis, again Mathis discloses a system architecture and apparatus poignantly improving the current state of the art by removing the need for a central host or controller in a gaming networking system. It appears the examiner is making a gross, and improper, generalization regarding networking. In item 3 of the final office action, the examiner

states that Wells discloses, "...wherein the first and second gaming devices exchange..." I see this nowhere in Wells' disclosure or an insinuation to it. The examiner is apparently making this statement due to a personal interpretation of Fig. 1 of Wells. Diagrams can be misleading regarding networking architecture. A network topology needs to not only consider electrical connection but must also consider data flow and node communication methodology. By the very nature of any network, all devices must be electrically coupled. However, this alone does not define a network architecture. In and of itself this aspect does not necessarily render the ability for true peer-to-peer communication. The read of Wells firmly fixes the network data flow method as being device-to-host and host-to-device only. How to apply Wells' solution with the addition of peer-to-peer communication is not obvious.

13. Specifically regarding item 3 of the Office Action, it closes on what is a disregard for the difference between true peer-to-peer communication and peer-to-central-server-to-peer communications. The significance of this difference lies in the advancements of having the ability to de-centralize the system as discussed above.

14. Specifically regarding item 4 of the Office Action appears to be missing a crucial point; combining Lockton and Wells to create a casino network which can broadcast data sets does not seem to be the point of Mathis and is moot regarding this solution. Mathis is advancing the art to have the ability of peer-to-peer data set communication which carries functional advancements as stated above. The examiner states that the functionality for progressive and bonusing features is there in Wells/Lockton. However, the functionality is not there without the host attached which is not the case in Mathis. Wells/Lockton also lacks the device interaction features of Mathis as described above.

15. Lockton and Mathis are solving different problems. Lockton's problem is keeping multiple software application instances coordinated by passing structured data between terminals and a central server then broadcasting back out to all terminals. In this context, this may be done in a non-real-time manner due to the large-scale network required (which does not allow for real-time functionality in Lockton's case). For Lockton there is no problem of timing and simultaneous events which allows for the terminal-to-central-server-to-terminal solution. Mathis is solving the problem of real-time and simultaneous events which requires a much different sort of solution. Note this is also where Wells is extended by Mathis. Mathis solves this context sensitive problem by using direct peer-to-peer communications. Peer-to-peer networks are very different from what Lockton requires. This is why Lockton makes no exploration of such structures; it is not a problem to be solved in his context. Proper handling of real-time and simultaneous events in the casino context is paramount regarding features such as progressives and bonusing. Lockton's solution is inadequate here and a way of extending it to solve this problem is not obvious aside from the context not presenting the problem.

16. Lockton "broadcasts" data sets because it is the only method which can be applied in his solution. It is not the most effective one. Mathis may broadcast in his solution. However, for purposes of device interaction it is more effective to communicate data sets

on a peer-to-peer basis. This method is not shown nor is its achievement obvious regarding Lockton's disclosure.

17. In general requiring only the ability to broadcast data sets is a very different problem from aiding the ability to communicate data sets peer-to-peer.

18. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.

Carmen DiMichele

7/19/2008
Date